



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Alice M. Chiang, Jeffrey M. Gilbert and Steven R. Broadstone  
Application No.: 10/748,690 Filed Date: December 30, 2003  
Confirmation No.: 1996 Group Art: 3662 Examiner: Not Assigned  
For: Integrated Portable Ultrasound Imaging System

CERTIFICATE OF MAILING	
I Hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450	
on <u>September 29, 2004</u>	<u>Mary P. McDermott</u>
Date	Signature
<u>MARY P. McDERMOTT</u>	
Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(More than 3 months after receipt of the International Search Report, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Enclosed herewith is form PTO-1449:

- ☐ Copies of the cited references are enclosed.
- ☒ In accordance with 37 C.F.R. § 1.98 (d), copies of cited references (AA-AK, AA2-AK2, AA3-AK3, AA4-AK4, AA5-AC5, AL-AM and AR-AX) are not enclosed as these references were entered in earlier application, U.S. Application No. 09/921,976, now Patent No. 6,671,227, to which the present application claims priority under 35 U.S.C. 120. The earlier application contains copies of the cited references.
- ☒ If copies of references (AA-AK, AA2-AK2, AA3-AK3, AA4-AK4, AA5-AD5, AL-AM and AR-AX) would benefit the Examiner of this case, the Examiner is invited to call the undersigned attorney and copies will be forwarded immediately.
- ☒ Listed references (AB, AJ, AI2, AG3, AI3, AK3 and AL-AM) were cited in the enclosed International Search Report in a counterpart foreign application.

Concise Explanation Requirement (non-English references):

- ☐ The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ the enclosed English language abstract.

☐ Applicant requests that the following pending applications be considered:

Examiner's  
Initials

\_\_\_\_\_  
U.S. Patent Application No. [ ], Publication No. [ ], Publication Date [ ],  
by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
U.S. Patent Application No. [ ], Publication No. [ ], Publication Date [ ],  
by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
U.S. Patent Application No. [ ], Publication No. [ ], Publication Date [ ],  
by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

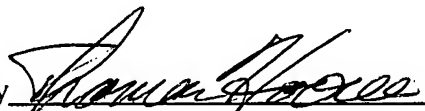
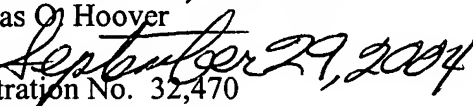
It is requested that the information disclosed herein be made of record in this application.

Method of payment:


- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account No. 50-1935 in the amount of \$[ ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account No. 50-1935.

Respectfully submitted,

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PTO-1449 REPRODUCED  INFORMATION DISCLOSURE CITATION IN AN APPLICATION  5/19/2004 (Use several sheets if necessary)				ATTORNEY DOCKET NO. 301496.1005-118		APPLICATION NO. 10/748,690	
				APPLICANT Alice M. Chiang <i>et al.</i>			
				FILING DATE December 30, 2003		GROUP ART UNIT 3662	
U.S. PATENT DOCUMENTS							
EXAM- -NER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA	4,034,483	07/12/77	Bernstein <i>et al.</i>	35	10.4	
	AB	4,152,678	05/01/79	Shott <i>et al.</i>	333	150	
	AC	4,159,462	06/26/79	Rocha <i>et al.</i>	340	1	
	AD	4,173,007	10/30/79	McKeighen <i>et al.</i>	367	11	
	AE	4,227,417	10/14/80	Glenn	73	625	
	AF	4,233,678	11-11-80	Brady, III	367	122	
	AG	4,241,608	12-30-80	Dees <i>et al.</i>	73	606	
	AH	4,244,037	01/06/81	Jelks	367	121	
	AI	4,245,333	01/13/81	Jelks	367	121	
	AJ	4,253,168	02/24/81	Petrosky <i>et al.</i>	367	123	
	AK	4,254,662	03/10/81	Kuroda <i>et al.</i>	73	626	
	AA2	4,267,584	05/12/81	McKeighen <i>et al.</i>	367	11	
	AB2	4,274,148	06/16/81	Hullenaar	367	122	
	AC2	4,277,787	07/07/81	King	343	100	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
	AL	2 130 798 A	06 Oct 82	United Kingdom			
	AM	0 593 822 A1	19 Oct 92	EPO			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AR	Takeuchi, Y., "Coded Excitation for Harmonics Imaging", <i>IEEE ULTRASONICS SYMPOSIUM</i> , 1433-1437 (1996).					
	AS	Brady, J.J., "A serial phase shift beamformer using charge transfer devices", <i>8014 Journal of acoustical Sty of America</i> , Vol. 68 (1980) August, N'2, New York, NY.					
	AT	Beetner, D.G., and Arthur, M.R., "Generation of Synthetic-Focus Images from Pulse-Echo Ultrasound Using Difference Equations", <i>IEEE</i> , 665-672 (October, 1996).					
EXAMINER				DATE CONSIDERED			

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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AD2	4,307,613	12/29/81	Fox	73	626	
	AE2	4,313,184	01/26/82	Jarman <i>et al.</i>	367	88	
	AF2	4,336,607	06/22/82	Hill <i>et al.</i>	367	123	
	AG2	4,401,957	08/30/83	McKeighen <i>et al.</i>	333	165	
	AH2	4,464,726	08/07/84	Chiang	364	606	
	AI2	4,544,927	10/01/85	Kurth <i>et al.</i>	343	373	
	AJ2	4,616,231	10/07/86	Autrey <i>et al.</i>	342	374	
	AK2	4,947,176	08/07/90	Inatsune <i>et al.</i>	342	173	
	AA3	5,014,250	05/07/91	Hadderingh	367	124	
	AB3	5,029,144	07/02/91	Griffin	367	11	
	AC3	5,030,953	07/09/91	Chiang	341	172	
	AD3	5,031,625	07/16/91	Higashiizumi <i>et al.</i>	128	660.01	
	AE3	5,089,983	02/18/92	Chiang	364	844	
	AF3	5,126,962	06/30/92	Chiang	364	725	
	AG3	5,200,755	04/06/93	Matsuda <i>et al.</i>	342	158	
	AH3	5,228,007	07/13/93	Murakami <i>et al.</i>	367	103	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AU	Broadstone, S.R., and Arthur, M.R., "Determination of Time-of-Flight Surfaces Using the Method of Moments", <i>IEEE</i> , 173-179 (June, 1991).					
	AV	Shott, J.D., et al., "Charge-coupled devices for use in electronically-focused ultrasonic imaging systems", <i>8049 Proceedings of the I.E.E.-F</i> , Vol. 127 (1980) April, N°2, Stevenage.					
	AW	Macovshi, Albert, "Ultrasonic Imaging Using Arrays", <i>Proceedings of the IEEE</i> , Vol. 67, No. 4, April, 1979.					
	AX	Tanaka, T., et al., "Digital Signal Processor for Digital Multi Beam Forming Antenna in Mobile Communication", <i>Proceedings of the Vehicular Technology Conference</i> , Stockholm, Vol. 3, Conf. 44, pp. 1507-1511 (June 8-10, 1994).					
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	AI3	5,276,452	01/04/94	Schuss <i>et al.</i>	342	371	
	AJ3	5,309,409	05/03/94	Jones <i>et al.</i>	367	103	
	AK3	5,343,211	08/30/94	Kott	342	379	
	AA4	5,363,108	11/08/94	Fullerton	342	27	
	AB4	5,386,830	02/07/95	Powers <i>et al.</i>	128	661.09	
	AC4	5,517,537	05/14/96	Greene <i>et al.</i>	376	252	
	AD4	5,533,383	07/09/96	Greene <i>et al.</i>	73	40.5	
	AE4	5,535,150	07/09/96	Chiang	364	724.19	
	AF4	5,555,200	09/10/96	Chiang	364	606	
	AG4	5,555,534	10/10/96	Maslak <i>et al.</i>	367	175	
	AH4	5,590,658	01/07/97	Chiang <i>et al.</i>	128	661.01	
	AI4	5,623,930	04/29/97	Wright <i>et al.</i>	128	661.1	
	AJ4	5,685,308	11/11/97	Wright <i>et al.</i>	128	660.07	
	AK4	5,822,276	10/13/98	Miklovic	367	103	
	AA5	5,904,652	05/18/99	Gilbert <i>et al.</i>	606	447	
	AB5	6,111,816	08/29/00	Chiang <i>et al.</i>	367	7	
	AC5	6,292,433 B1	09/18/01	Gilbert <i>et al.</i>	367	138	
	AD5	6,671,227 B2	12/30/03	Gilbert <i>et al.</i>	367	138	
EXAMINER				DATE CONSIDERED			